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(54) COATED OPTICAL FIBER

cable, etc.

(57) Abstract:

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**PURPOSE:** To prevent longitudinal crack and to obtain a high transmission characteristic by providing a resin layer between a buffer layer provided on the outside circumference of an optical fiber and a reinforcing coat layer formed on the outside thereof and adhering the resin layer and the reinforcing coat layer.

**CONSTITUTION:** A resin layer 4 is interposed between a buffer layer 3 provided on the outside circumference of an optical fiber 1 and a reinforcing resin (FRP) layer 5 consisting of fiber-reinforced plastics. The resin layer 4 and the FRP layer 5 are adhered. The resin layer 4 is preferably formed of a curable resin. The resin layer 4 of the optical fiber having such constitution supports the FRP layer 5 and suppresses the deformation of the FRP layer 5 and therefore the mechanical characteristic of the fiber is improved and the incidence of generating longitudinal crack is decreased. The microbend occurring in the FRP layer 5 is prevented by such resin layer 4 and therefore the high transmission characteristic of the coated optical fiber is assured and the fiber is used for a core for an underground buried communication

